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Agenda Overview





• Overview of Community Water Center Report



- Drought Contingency Plans for Rural and Disadvantaged
 Unincorporated Communities in California
- Overview of Proposed Draft Framework Elements
- Developing Appropriate Shortage Response Actions
- Wrap-Up and Next Steps



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CA Water Commission: Commissioned Study



Drought Contingency Plans – For Rural Disadvantaged Unincorporated Communities in California

May 8, 2017

Prepared by: Yale University School of Forestry & Environmental Studies; Environmental Governance and Justice Practicum

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CWC Commissioned Study

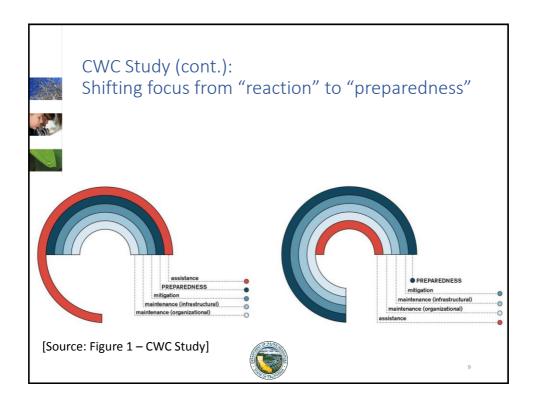


Drought Contingency Plans – For Rural Disadvantaged Unincorporated Communities in California (May 8, 2017)



- Methodology: Analyze academic literature and 18 drought and water management plans, including:
 - Tribal drought contingency plans
 - Urban water management plans
 - · Irrigation district management plans
 - County water shortage plans
 - State and regional drought contingency plans

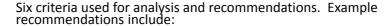






CWC Study: Recommendations







- Pre-assessment prioritize projects for disadvantaged communities; assign drought risk factors, consider cultural norms
- 2. Integration coordinate with other plans; involve county health depts.; integrate with existing hazard mitigation plans
- 3. Communications outline roles and responsibilities; use multiple comm. methods and account for varying education and languages
- Public participation consider timing, access and setting; two-way communications; public's handling of uncertainty
- 5. Review and update carry-out a "drill"; update annually; address equity
- Funding create local fund reserves; shift funds to preparedness; pre-arrange NGO partnerships; consider equity in water shortage fees





CWC Study: Conclusion





 "Incorporating drought contingency planning comprehensively across all planning documents and making it a requirement for county or district water management plans must be the next step toward moving from a reactive to a preventative paradigm."



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Draft Framework





• EO#10: "For areas not covered by a Water Shortage Contingency Plan, the Department shall work with counties to facilitate improved drought planning for small water suppliers and rural communities."



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Draft Framework (cont.):





• <u>Purpose</u>: To demonstrate preparation, planning and response to water shortages:



- Demonstrating drought preparedness coverage;
- Assessing current drought vulnerability for all citizens;
- Taking proactive actions to reduce drought vulnerability;
- Improving availability and readiness of appropriate responses;
- Communicating with citizens, state, and others;
- Adaptively responding to conditions and refining assessment protocols, responses, and communications.





Draft Framework (cont.):







- Demonstrate planning coverage (Frequency: initial report, then periodic review/update)
- · Assess current drought vulnerability (Frequency: initial risk determination, 5-year update)
- · On-going drought risk assessment (Frequency: annually, or more frequently as conditions may dictate)
- · Prepare response strategies and implementation plans (Frequency: initial actions and plan, followed by periodic update)
- Establish and implement reporting, coordination and communication protocols

(Frequency: initial actions and plan, followed by periodic update)





Draft Framework: Demonstrate Planning Coverage







- The county should demonstrate to the state and its citizenry that all citizens are covered by a drought contingency plan whether that plan is prepared by the county or by another responsible party (e.g. water supplier). (Frequency: initial report, then periodic review/update):
 - Assess current drought planning coverage for potable water users that are:
 - Served by a public water system (publicly or privately owned)
 - Self-supplied
 - Describe how coverage will be assured within two years for any area not currently covered.



Draft Framework: Assess Current Drought Vulnerability





- The county should make an initial assessment of drought vulnerability throughout the county, assigning risk factors that subsequently can be used for on-going analysis. This step may be facilitated by subdividing the county's geographic extent by various distinguishing factors, then focusing future analysis on regions with higher risk. (Frequency: initial risk determination, 5-year update)
 - Assessment procedures and timeframes
 - · Initial risk assessment for entire county
 - Assessment and prioritization refinement (every 5 years)
 - · Initial data collection and management
 - Identify data related to risk factors
 - · Establish data collection and management protocols for any data not already collected by the county or otherwise readily available (see EO agencies metadata
 - · Organize data for risk assessment

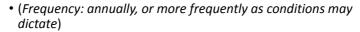




Draft Framework: On-going Drought Risk Assessment









- Recurrent assessment
 - · Define method
 - · Perform assessment for priority regions
- Recurrent data collection and management
 - Expand data related to risk factors (see initial data collection)
 - Develop additional data collection and management protocols



Draft Framework: Prepare Response Strategies and Implementation Plans



(Frequency: initial actions and plan, followed by periodic update)

- Develop proactive strategies and actions to reduce drought-vulnerable citizenry
- Develop monitoring and tracking protocols with thresholds established to trigger staged responses based upon severity of drought
- Develop staged response strategies that correlate to severity of drought conditions, based upon results of on-going drought risk assessment for a particular boundary.
- Develop implementation plan
- Refine proactive and active-drought response strategies based upon adaptive understanding of local potable water supply and demand conditions



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Draft Framework: Establish and Implement Reporting, Coordination, and Communication Protocols



(Frequency: initial actions and plan, followed by periodic update)



- Sufficiency reporting to EO agencies (see EO roles and responsibilities)
 - Submit report demonstrating sufficient drought planning coverage (or path to achieve complete coverage in a reasonable time frame), and required elements of drought preparedness
- · Prepare and adopt a Drought Preparedness Plan
 - Prepare plan documenting necessary elements (see EO roles and responsibilities) to demonstrate sufficiency
 - · Community outreach during preparation plan
 - Demonstrate ability to implement proactive and active-drought response strategies
- Local coordination and communications
 - Groundwater Sustainability Agency (GSA)
 - Water suppliers
 - Self-supplied users
 - · State and federal entities providing technical and financial assistance





Draft Framework (cont.):



- DWR potential assistance role
 - Establish compliance requirements
 - Define required plan elements and submittal process
 - Aid with resolving implementing authority limits
 - · Provide technical and financial assistance
 - Metadata conventions; Data collection, management, and accessibility
 - Vulnerability assessments (guidance for risk thresholds and assessment methods)
 - · Proactive actions
 - · Response measures
 - · Establish communication pathways with counties
 - · Drought risk alerts
 - · Promote and facilitate assistance opportunities



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Response Strategies



Response Strategies





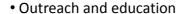
- Ideally, most conditions would require no action beyond tracking, reporting and communication protocols. If tracked factors reach pre-defined thresholds, then staged response strategies would trigger (see example workflow diagram with 3 stages)
 - Stage 1 initiate outreach and education and initiate first-tier programs, alert appropriate local, state and federal agencies and coordinate with local non-profit interests.
 - Stage 2 expand outreach and education, initiate second-tier programs, and increase communications with state/federal resources.
 - Stage 3 initiate third-tier programs (and engage state/federal resources (e.g. emergency declarations, grant funds,)



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Response Strategies (cont.): Stage 1 Examples







- Keep citizens informed on conditions
- Direct citizens to tools (e.g. like Tulare's 2-1-1)
- To landlords and property managers (actions and tenant's rights)
- Alert County management (resource needs)
- Alert appropriate state agencies



Response Strategies (cont.): Stage 2 Examples







· Request emergency proclamation



- Extend well permit review timeline
- Expand staff and budget resources
- · Trigger pre-established relationships with NGOs
- Trigger pre-established contracts with state agencies (e.g. assist with outreach, inspections, administration, and implementation)
- · Secure state and federal emergency resource funds
- Require mandatory reduction in well production for all permitted wells
- Pursue state assistance could (emergency wells, bottled water, enforcing statutes)
- · Increase frequency of monitoring of at-risk boundary areas to monthly



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Response Strategies (cont.): Stage 3 Examples







• Seek state emergency declaration, if not already in place.



- Temporarily well permit/drilling moratorium
- Expand mandated reduction targets begun under Stage 2
- · Further expand targeted outreach and education programs
- Increase access to assistance services
- Implement mutual aid agreements.
- · Expand state assistance
- · Implement temporary water programs
- Implement other health and safety actions
- Increase frequency of monitoring of at-risk boundary areas to weekly



